

In the claims

1-13 (canceled).

14. (new) A fibre channel arbitrated loop apparatus, the apparatus comprising:

a matrix of switches having N fibre channel inputs and M fibre channel outputs,

the matrix comprising N x M switches, each of the switches associated with a respective one of the N fibre channel inputs and with a respective one of the M fibre channel outputs, the switches disposed such that any one of the N fibre channel inputs can be connected with any one of the M fibre channel outputs by closure of a particular one of the N x M switches,

configuration means communicatively coupled with the switches, said means disposed to bring about, for at least one of the N fibre channel inputs, the closing at the same time of at least two switches associated therewith, whereby at least two of the M fibre channel outputs are both connected with the at least one of the N fibre channel inputs.

15. (new) The apparatus of claim 14 further comprising:

a first fibre channel device having a fibre channel input and a fibre channel output, the fibre channel output of the device connected with a first one of the N fibre channel inputs of the matrix of switches, the fibre channel input of the device connected with a first one of the M fibre channel outputs of the matrix of switches,

a second fibre channel device having a fibre channel input and a fibre channel output, the fibre channel output of the device connected with a second one of the N fibre channel inputs of the matrix of switches, the fibre channel input of the device connected with a second one of the M fibre channel outputs of the matrix of switches,

a fibre channel analyser having a fibre channel input, the fibre channel input of the analyzer connected with a third one of the M fibre channel outputs of the matrix of switches,

the switches of the matrix disposed such that the first one of the N fibre channel inputs is connected to the second one of the M fibre channel outputs and is also connected with the third one of the M fibre channel outputs.

16. (new) The apparatus of claim 14 wherein N and M are the same.

17. (new) The apparatus of claim 14 wherein N is greater than M.

18. (new) The apparatus of claim 14 wherein N is less than M.

19. (new) A method for use with with a fibre channel arbitrated loop a matrix of switches having N fibre channel inputs and M fibre channel outputs, the matrix comprising N x M switches, each of the switches associated with a respective one of the N fibre channel inputs and with a respective one of the M fibre channel outputs, the switches disposed such that any one of the N fibre channel inputs can be connected with any one of the M fibre channel outputs by closure of a particular one of the N x M switches, the method comprising the steps of:

for a first one of the N fibre channel inputs, closing a first one of the switches associated therewith, whereby a first one of the M fibre channel outputs is connected with the first one of the N fibre channel inputs,

while the first one of the switches is closed, closing a second one of the switches associated with the first one of the N fibre channel inputs, whereby a second one of the M fibre channel outputs is connected with the first one of the N fibre channel inputs.

20. (new) The method of claim 19 further comprising the steps of:

connecting an input of a fibre channel analyser to the second one of the M fibre channel outputs.

21. (new) The method of claim 20, performed with respect to first and second fibre channel devices each having a fibre channel input and a fibre channel output, the method further comprising the steps of:

connecting the output of the first fibre channel device to the first one of the N fibre channel inputs;

connecting the input of the first fibre channel device to a second one of the N fibre channel outputs;

connecting the output of the second fibre channel device to a second one of the N fibre channel inputs;

connecting the input of the second fibre channel device to a third one of the N fibre channel outputs;

whereby any fibre channel data that is output by the first fibre channel device is communicated both to the input of the second fibre channel device and to the input of the fibre channel analyzer, and the connection of the fibre channel analyser does not contribute to any latency in the connection from the first fibre channel device to the second fibre channel device.